

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF PENNSYLVANIA**

GEORGE RUSSELL METIL,	:	
Plaintiff	:	No. 2:16-cv-00968
	:	
v.	:	(Judge Kane)
	:	
CORE DISTRIBUTION, INC., et al.,	:	
Defendants	:	

MEMORANDUM

Before the Court is Defendants' fully briefed motion for summary judgment (Doc. No. 59), and motion to exclude the testimony of Plaintiff's expert witness, Kai J. Baumann, Ph.D. (Doc. No. 73). A hearing was held on the pending motions on July 12, 2018, at which time Plaintiff declined the opportunity to present the testimony of his expert witness. Upon detailed consideration of the arguments raised by the parties in their respective briefs, the arguments offered at the hearing, and the applicable law, the Court will grant Defendants' motion to exclude the testimony of Kai J. Baumann, Ph.D. ("Dr. Baumann"), and will grant Defendants' motion for summary judgment in its entirety.

I. BACKGROUND

On March 4, 2016, Plaintiff George Russell Metil commenced the above-captioned product liability action by filing a writ of summons in the Court of Common Pleas of Allegheny County, seeking to recover for injuries he sustained on March 24, 2014, when he fell from an allegedly defective 15.5 foot telescoping ladder manufactured by Defendant Core Distribution, Inc. ("Core Distribution"), and purchased from a Sherwin-Williams Store, while painting a residence in Greensburg, Pennsylvania. (Doc. No. 1 at 1.) Plaintiff eventually filed a three-count complaint asserting causes of action sounding in negligence, strict liability, and breach of

implied warranty on June 8, 2016. (*Id.*) On June 28, 2016, Defendants Core Distribution, the Sherwin-Williams Company, and the Sherwin-Williams Company d/b/a Sherwin-Williams Paint Store filed a timely notice of removal to the United States District Court for the Western District of Pennsylvania based on complete diversity of citizenship under 28 U.S.C. § 1332. (*Id.* at 2.) On July 5, 2016, Defendants answered the complaint. (Doc. Nos. 7, 8.)

On November 1, 2016, while this case was proceeding through discovery, Plaintiff's counsel filed a motion to withdraw and a request for a ninety-day stay of proceedings. (Doc. No. 24.) That same day, Defendants filed a brief in opposition to the motion to withdraw as counsel and requested dismissal of the action with prejudice. (Doc. No. 25.) In their oppositional brief, Defendants argued that the evidence obtained during discovery revealed that the ladder forming the basis of Plaintiff's complaint "could not be the ladder allegedly involved in the accident," as Plaintiff testified during his deposition that he utilized a 20 foot ladder at the time of the incident, and a Sherwin Williams receipt established that a 15.5 foot ladder was purchased after the accident, therefore warranting dismissal of this action in its entirety. (*Id.*) At the conclusion of a show cause hearing, the magistrate judge granted the motion to withdraw (Doc. No. 28), and entered an amended case management order setting the fact discovery deadline for January 31, 2017 (Doc. No. 29).

On December 1, 2016, Defendants moved to compel Plaintiff, then proceeding pro se, to produce documents in response to their request for production. (Doc. No. 31.) On December 2, 2016, the court granted Defendants' motion to compel (Doc. No. 34), and referred the case to mediation (Doc. No. 33), which was ultimately unsuccessful (Doc. No. 36). On January 20, 2017, Defendants moved for sanctions against Plaintiff in the form of an order precluding

Plaintiff from introducing any testimony with regard to personal injuries, medical care provided in response to his alleged personal injuries, and evidence of financial loss due to Plaintiff's failure to comply with the court's order directing him to furnish documents responsive to Defendants' requests for production. (Doc. No. 37.) A hearing was held on the motion for sanctions on February 2, 2017, at the conclusion of which the court entered an order that granted in part Defendants' motion and precluded Plaintiff from using any discovery, including expert discovery that was not previously produced during the discovery period, in response to any motion for summary judgment or at trial. (Doc. No. 42.) In conjunction with its order, the court stayed and administratively closed the case for a period of thirty days to permit Plaintiff an opportunity to obtain counsel. (Doc. No. 41.)

On March 6, 2017, Plaintiff filed an opposed motion for reconsideration of the court's order granting in part Defendants' motion for sanctions, together with a request to reopen discovery in light of his subsequent retention of counsel, which the court granted on March 7, 2017, following a status call with the parties. (Doc. Nos. 44, 46, 47.) Thereafter, this matter was reassigned to the undersigned pursuant to 28 U.S.C. § 292(b) to conduct further proceedings. (Doc. No. 58.)

On October 2, 2017, Defendants filed the pending motion for summary judgment pursuant to Federal Rule of Civil Procedure 56 (Doc. No. 59), a brief in support of their motion (Doc. No. 60), a concise statement of material facts (Doc. No. 61), and corresponding exhibits (Doc. Nos. 59-1-59-9). On November 2, 2017, Plaintiff filed a brief in opposition to the motion for summary judgment (Doc. No. 65), together with a responsive statement of undisputed material facts (Doc. No. 64), a sworn affidavit (Doc. No. 67), and several exhibits (Doc. Nos. 64-

1-64-5). Defendants filed a reply to Plaintiff's opposition brief to their motion for summary judgment (Doc. No. 68), and a response to Plaintiff's statement of facts (Doc. No. 69), on November 16, 2017. Observing that disposition of Defendants' motion for summary judgment rested on a determination regarding the admissibility of the testimony of Plaintiff's proposed expert, Dr. Baumann, the Court directed that Defendants file a properly-supported motion under Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993), addressing the admissibility of the expert testimony challenged in connection with their motion for summary judgment, and stayed its consideration of Defendants' motion for summary judgment pending the submission of any Daubert motions. (Doc. No. 72.) In accordance with the Court's Order, Defendant filed the instant motion to exclude the testimony of Dr. Baumann, on December 22, 2017 (Doc. Nos. 73, 74), which became ripe on March 26, 2018 (Doc. Nos. 78, 83). The Court held a hearing on the motion on July 12, 2018, at which time it entertained additional argument from the parties.

II. LEGAL STANDARD

A. SUMMARY JUDGMENT STANDARD

Summary judgment under Federal Rule of Civil Procedure 56(a) is appropriate "if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). "[T]his standard provides that the mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no genuine issue of material fact." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 247-48 (1986) (emphasis in original). A factual dispute is material if it might affect the outcome of the suit under the applicable law, and is genuine only if there is a sufficient evidentiary basis that would allow a

reasonable fact finder to return a verdict for the non-moving party. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248-49 (1986). Thus, where no material fact is in dispute, the moving party need only establish that it is entitled to judgment as a matter of law. Anderson, 477 U.S. at 248. Conversely, where there is a dispute as to an issue of material fact, the moving party must establish that the factual dispute is not a genuine one. Id.

The party moving for summary judgment bears an initial burden of identifying evidence that it believes demonstrates the absence of a genuine issue of material fact. Conoshenti v. Pub. Serv. Elec. & Gas Co., 364 F.3d 135, 145-46 (3d Cir. 2004). Once the moving party has carried this initial burden, “the nonmoving party must come forward with specific facts showing that there is a genuine issue for trial.” Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586–87 (1986) (internal quotation marks omitted). If the non-moving party “fails to make a showing sufficient to establish the existence of an element essential to that party’s case, and on which that party will bear the burden at trial,” summary judgment is warranted. Celotex, 477 U.S. at 322. With respect to the sufficiency of the evidence that the non-moving party must provide, a court should grant summary judgment where the non-movant’s evidence is merely colorable, conclusory, or speculative. Anderson, 477 U.S. at 249-50. There must be more than a scintilla of evidence supporting the non-moving party and more than some metaphysical doubt as to the material facts. Id. at 252; see also Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586 (1986).

In determining whether there is a genuine issue of material fact, the court must view the facts and all reasonable inferences in favor of the nonmoving party. Moore v. Tartler, 986 F.2d 682 (3d Cir. 1993); Clement v. Consolidated Rail Corp., 963 F.2d 599, 600 (3d Cir. 1992);

White v. Westinghouse Electric Co., 862 F.2d 56, 59 (3d Cir. 1988). In deciding a motion for summary judgment, the court need not accept allegations that are merely conclusory in nature, whether they are made in the complaint or a sworn statement. Lujan v. Nat'l Wildlife Fed'n, 497 U.S. 871, 888 (1990). Moreover, the court's function is not to make credibility determinations, weigh evidence, or draw inferences from the facts. Anderson, 477 U.S. at 249. Rather, the court must simply "determine whether there is a genuine issue for trial." Id.

B. FEDERAL RULE OF EVIDENCE 702

Federal Rule of Evidence 702 governs the admissibility of expert testimony. Fed. R. Evid. 702. Rule 702 states, in relevant part:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) The expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) The testimony is based on sufficient facts or data;
- (c) The testimony is the product of reliable principles and methods; and
- (d) The expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702.

As the United States Court of Appeals for the Third Circuit has explained, "Rule 702 embodies a trilogy of restrictions on expert testimony: qualification, reliability and fit." Schneider v. Fried, 320 F.3d 396, 404 (3d Cir. 2003). The rules impose an obligation on district court judges to act as "gatekeepers" to ensure that an expert witness' testimony meets those three threshold requirements before consideration by a jury. Kumho Tire Co. v. Carmichael, 526 U.S.

137, 147 (1999); Daubert, 509 U.S. at 597. In fulfilling its obligation as a gatekeeper, a court exercises discretion when deciding whether to admit or deny expert testimony. Gen. Elec. Co. v. Joiner, 522 U.S. 136, 146-47 (1997).

When considering the qualification requirement, a court must discern whether a purported expert has specialized knowledge in a given field. Pineda v. Ford Motor Co., 520 F.3d 237, 244 (3d Cir. 2008). In undertaking this inquiry, no particular background or credentials are necessary to establish the requisite specialized knowledge, as “a broad range of knowledge, skills, and training qualify an expert.” In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 741 (3d Cir. 1994); see also Waldorf v. Shuta, 142 F.3d 601, 627 (3d Cir. 1998) (noting that a proposed expert witness’ generalized knowledge or practical experience may be sufficient to qualify him as an expert). While the Third Circuit has instructed that a court must “eschew[] imposing overly vigorous requirements of expertise,” the determination of whether an expert is qualified to testify about a particular topic has not been reduced to a mere formality. Indeed, a court’s assessment of a proposed expert’s qualifications is predominantly a fact-specific endeavor that is governed by the unique circumstances of each case. Voilas v. Gen. Motors Corp., 73 F. Supp. 2d 452, 456 (D.N.J. 1999) (quoting United States v. Velasquez, 64 F.3d 844, 849 (3d Cir. 1995)).

As for the reliability requirement, the United States Supreme Court has held that the gatekeeping function requires the trial court to “make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” Kumho Tire, 526 U.S. at 152. To meet this requirement, “a litigant has to make more than a prima facie showing that his expert’s methodology is reliable . . . [but] the evidentiary

requirement of reliability is lower than the merits standard of correctness.” Pineda, 520 F.3d at 244. The expert’s opinion “must be based on the methods and procedures rather than on ‘subjective belief or unsupported speculation.’” In re TMI Litig., 193 F.3d 612, 664 (3d Cir. 1999) (citation omitted). “The focus is not upon the expert’s conclusions, but rather upon his methodology; the issue is whether the evidence should be excluded because the flaw is large enough that the expert lacks good grounds for his or her conclusions.” In re Paoli R.R. Yard PCB Litig., 35 F.3d at 746. When evaluating the reliability of a witness’ methodology, a court is guided by several familiar factors drawn from Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993):

(1) whether a method consists of a testable hypothesis; (2) whether the method has been subject to peer review; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the technique’s operation; (5) whether the method is generally accepted; (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness testifying based on the methodology; and (8) the non-judicial uses to which the method has been put.

Paoli, 35 F.3d at 742 n.8. These factors “may or may not be pertinent in assessing reliability, depending on the nature of the issue, the expert’s particular expertise, and the subject of his testimony.” Kumho Tire, 526 U.S. at 150. Accordingly, the Rule 702 inquiry is a flexible one, and a court should also take into account any other relevant factors. Calhoun, 350 F.3d at 321.

A third requirement, which pertains to fit, requires “the expert’s testimony [to be] relevant for the purposes of the case and . . . [to] assist the trier of fact.” Schneider, 320 F.3d at 404. “Rule 702’s helpfulness standard requires a valid scientific connection to the pertinent inquiry as a precondition to admissibility.” Daubert, 509 U.S. at 591-92. Indeed, an expert who renders an opinion based on factual assumptions not present in the case or opines on a matter that

does not relate to a disputed issue is not relevant, and thus, will not assist the trier of fact, as required by Rule 702. *Id.* For example:

The study of the phases of the moon . . . may provide valid scientific “knowledge” about whether a certain night was dark, and if darkness is a fact in issue, the knowledge will assist the trier of fact. However (absent creditable grounds supporting such a link), evidence that the moon was full on a certain night will not assist the trier of fact in determining whether an individual was unusually likely to have behaved irrationally on that night.

Id. Like the typical relevance inquiry, the standard for analyzing the fit of an expert’s analysis to the case at hand is “not that high.” *United States v. Ford*, 481 F.3d 215, 219-20 (3d Cir. 2007) (quoting *Paoli*, 35 F.3d at 745). However, expert testimony can be powerful and misleading because of the difficulty in evaluating it, and the Third Circuit has cautioned that “district courts should tread carefully when evaluating proffered expert testimony, paying special attention to the relevance prong of *Daubert*.” *Id.* at 219 n.6.

III. DISCUSSION

A. MOTION TO EXCLUDE

Plaintiff has tendered Dr. Baumann as an expert who will testify as to whether the subject 15.5 foot Pro-Series 785P telescoping ladder contained a design defect caused Plaintiff’s injuries.¹ Defendants move to exclude the testimony of Dr. Baumann on the basis that his causative opinions are neither reliable nor relevant.

¹ Notably, Dr. Baumann’s expert report offers two possible theories to explain why the ladder may have collapsed: (1) the unstable friction coefficient as to the ladder’s feet (a theory that is discussed in detail infra); or (2) the improper latching of one of the ladder’s rungs. As it specifically relates to Dr. Baumann’s opinion that the ladder may have failed due to the partial retraction of one of the ladder’s rungs, Plaintiff explicitly conceded in his brief in opposition to Defendants’ motion, and at the hearing held on the motion, that “that there is insufficient factual support for the theory that a collapsed ladder rung initiated the fall of the ladder.” (Doc. No. 78 at 7.) He further clarified that “[t]he defects in the ladder [that] were present at the time it was

1. Dr. Baumann's Expert Report²

As detailed in his expert report, Dr. Baumann visited the accident site on September 19, 2016 and April 27, 2017, at which time he took measurements of the space, inspected the floor surface, interviewed the homeowner, and conducted several tests to determine the coefficient of friction, which he defines as the “ratio of the force required to move something horizontally divided by its weight or mass.” (Doc. No. 83-1 at 50.) In preparation for these tests, Dr. Baumann placed fabric between the subject ladder and the wall to protect the wall finish and secured the ladder with a cord to equalize the force on the ladder’s legs. He then used Wagner FDK-10 and Wagner FDK-60 force gages to capture the maximum force required to pull the ladder’s feet horizontally and initiate motion away from the wall. Dr. Baumann adjusted the angle of elevation from 69.8 degrees to 81 degrees for each subsequent test by repositioning the base of the ladder relative to the wall. The ladder was neither extended nor loaded with any additional weight for these tests. Dr. Baumann conducted 13 trial pulls using the Wagner force gages at the site of the accident. For the last 5 trial pulls, the ladder was rotated 180 degrees. The coefficients of friction for each of these trial pulls were obtained by simply dividing the ladder’s mass of 36.875 pounds by the pullout force. (See Doc. No. 83-1 at 61.) Dr. Baumann noted in his report that “[d]uring the early trials[, he] was puzzled by how easily the ladder

sold to Plaintiff . . . are the unstable friction coefficient and the medium hardness level of the foot material[,] which are the ‘scientific’ basis for Dr. Baumann’s threshold opinion regarding the cause of the sliding out and fall of the ladder in this case.” (Id.) In light of Plaintiff’s concession, the Court has limited its discussion to whether Dr. Baumann’s findings and conclusions regarding the ladder’s feet meet Daubert’s thresholds.

² As noted above, Plaintiff declined the opportunity to present testimony from Dr. Baumann at the evidentiary hearing. As the Court does not have the benefit of this testimony, it relies exclusively on the materials contained in the record, including Dr. Baumann’s expert report and deposition testimony.

sometimes pulled out.” (Doc. No. 52 at 4.) According to Dr. Baumann, the coefficient of friction values were “inconsistent,” ranging from .07 to .42. (Id.) While gathering this data, Dr. Baumann observed “dry reddish brown debris on the floor,” that was “originating from and crumbling off of the ladder feet,” samples of which he collected for later testing.³ (Id.) In hindsight, Dr. Baumann “realized the debris appeared to have significantly affected the results.” (Id.)

On May 2, 2017, Dr. Baumann performed an additional 40 trial pulls with both the subject ladder and an exemplar ladder to measure the coefficient of friction on several different surfaces, including painted wood, clean hardwood flooring, and hardwood flooring with drywall dust contamination. (Doc. No. 59-7 at 9.) Admittedly, Dr. Baumann did not “generate friction coefficients as low as those initially observed with the subject ladder at the accident site.” (Doc. Nos. 52 at 11; 83-1 at 98.) Dr. Baumann specifically notes in his report that he “did not attempt to apply moist dirt to the feet then let it dry, which appears to have occurred to the subject feet for it to have adhered and entered the abraded flap cavities.” (Doc. No. 52 at 11.)

As a baseline, Dr. Baumann calculated that the minimum coefficient of friction necessary to prevent the ladder from slipping when placed 3-to-4 feet from the wall would be .12 to .16 or more. (Id. at 9.) Dr. Baumann assumed for purposes of these equations that the wall was frictionless, the total weight and ladder load was 232 pounds, and the distance from the base of the ladder to the step absorbing the most weight was 9.5 feet. (Id.) With this baseline established, Dr. Baumann submitted that many of the friction coefficient values reported from

³ As detailed in Dr. Baumann’s expert report, the samples of debris material were tested on March 27, 2017 by Keith Wagner in Dr. Baumann’s presence. (Doc. No. 52 at 8.) The samples were examined using a scanning electron microscope and energy dispersive x-ray spectroscopy, which revealed that the debris was “Pennsylvania dirt containing clay (ambient minerals/clays).” (Id.)

his testing of the ladder on the subject floor “hover[ed] close to the sliding instability threshold (.12 to .16),” and some . . . [were] lower than that required to prevent [Plaintiff] from sliding out.” (Id. at 14.) Based on his observations of the accident site, his review of Plaintiff’s deposition testimony – which revealed that “the ladder feet slid essentially straight away from the wall” – and the tests he performed on the subject ladder, Dr. Baumann opined that “the cause of the accident [was] inadequate friction force of the ladder feet on the subject floor to resist the component of ladder loading trying to push the feet out.” (Id. at 13.)

In addition to the series of tests he performed to determine the coefficient of friction, Dr. Baumann had the composition of the feet of the ladder tested. Specifically, at the direction of Dr. Baumann, Keith Wagner of RJLee ran “Shore A hardness tests” on both feet of the ladder, which produced hardness values ranging from 60 to 67. (Id. at 8.) As explained by Dr. Baumann in his expert report, those values “run from the high end of medium soft to about the middle of medium hard. They are softer than a typical passenger car tire tread[,] which typically runs around 70.” (Id. at 8.)

Based on these findings, Dr. Baumann proposed that there were three potential design defects relating to the feet of the telescoping ladder that may have contributed to a reduction in the coefficient of friction necessary to prevent the ladder from slipping out from under Plaintiff: (1) the absence of foot articulation; (2) the small surface area of the ladder’s feet; and (3) the composition of the foot material, which allowed debris to become lodged in the foot pads, resulting in excessive foot wear and tear. (Id. at 13-17.) Specifically, Dr. Baumann’s findings regarding the feet of the telescoping ladder, which he opined may have caused its collapse, are outlined as follows:

3. The absence of articulating feet which remain fully in contact with the floor at all reasonable erection angles, leading to a small floor contact area, and the choice of foot material which has a medium shore A hardness leads to excessive foot wear and tear, debris contamination and concentration under the feet, debris storage chambers in the feet, unpredictable and changing friction, and a smaller than normal footprint which can bear on contaminants rather than on the floor.
4. Dirt patina observed inside the ladder feet abraded flaps torn surfaces indicates that many of the abrasive tears did not occur as freshly torn clean surfaces during this accident. The torn cavities appear to have acted as dirt storage chambers, essentially delivering an undesired and dangerous friction reducing lubricant to the foot/floor interface at the work site. This dirt remained hidden from normal view and was deposited at the floor/foot interface when the ladder was erected and climbed as the feet flexed under load. I did not notice the contamination when the ladder was initially presented to me at the accident site and when I began testing. It is foreseeable that a user will not notice the contamination which was present on the ladder feet was significant to his safety, especially if it is carried inside torn chambers.
5. The ladder feet by design and manufacture do not feature a reasonably large flat surface having the projected area of the rail or stile which will articulate and remain in contact with the floor to match the angle at which the ladder is set against the wall. The ladder footprint contact area changes as the ladder angle is changed and the feet wear. This renders the small footprint remaining in contact with the floor to be extremely susceptible to contaminants that can reduce the friction coefficient. The abrasive flaps which develop on the feet can act as rollers which destroy reliable friction holding capacity. Furthermore, dragging or movement of the ladder feet can collect and concentrate debris under the feet. These features were substantial contributing factors to this accident.

(Doc. No. 52 at 14-15.)

2. July 2, 2018 Affidavit

Significantly, ten days before the hearing scheduled for July 12, 2018, Plaintiff's counsel filed an affidavit with the Court that provided the following:

In preparing for this hearing, Plaintiff's counsel . . . spoke with his expert, Kai J. Baumann, Ph.D., P.E., who, during the course of the conversation, conceded that the conclusion contained on page 8 of the Defendant[s']

Expert Report regarding calculations pertaining to friction are correct. Specifically, Plaintiff's expert concedes the correctness of the following statement by Mr. [Thomas E. Bayer]:

“Calculations that I conducted show that if Dr. Baumann would have included the friction necessary for the ladder to maintain its position leaning up against the wall the results would show that the ladder would not have slipped out under any of the 53 different conditions that he measured.”

(Doc. No. 85 at 1.)

Defendants' expert in this case, Thomas E. Bayer, represented in his report that Dr. Baumann “elected to ignore the forces on the feet due to the ladder leaning against a wall when he tested it. . . . Once these are calculated and added to the additional force necessary to cause the feet to slide it makes a difference in the conclusions that should be drawn from the data.” (Doc. No. 54 at 11-12.)

3. Whether Dr. Baumann's opinions as to the cause of the ladder's collapse are admissible

In light of this later-filed affidavit, the Court finds that Dr. Baumann's opinions as to the cause of the ladder's collapse are unreliable, and thus, inadmissible.⁴ Dr. Baumann's theory of

⁴ In addition to challenging the reliability and relevance of the proffered expert's testimony, Defendants make a passing reference to Dr. Baumann's qualifications in their brief in reply. (Doc. No. 83 at 1) (“Additionally, plaintiff has failed to identify any basis upon which it can be concluded that Dr. Baumann is qualified to opine concerning the proper characteristics of a telescoping ladder.”). To Defendants' point, the Court questions whether Plaintiff has satisfied his burden of demonstrating that Dr. Baumann is qualified to offer an opinion in this case as to ladder components. Oddly, Plaintiff neither produced a copy of Dr. Baumann's curriculum vitae for the record, nor directed the Court to anything in the record from which it could determine that Dr. Baumann is, in fact, qualified to opine on matters concerning the ladder's design. Based on what was represented at the evidentiary hearing, and from what can be gleaned from the deposition transcript, Dr. Baumann is a doctor of mechanical engineering and a graduate of Carnegie-Mellon University, but has little to no experience working with telescoping ladders, designing ladders, manufacturing ladders, or serving on a safety committee that regulated ladder safety. (Doc. No. 83-1 at 18-19.) See, e.g., Delehanty v. KLI, Inc., 663 F. Supp. 2d 127, 132 (E.D.N.Y. 2009) (excluding expert testimony on causation in ladder-accident case upon finding

causation – that the ladder “slid essentially straight away from the wall” due to “inadequate friction force of the ladder feet on the subject floor to resist the component of ladder loading trying to push the feet out” – is entirely based on the results from the series of friction coefficient tests he performed on the subject ladder at the site of the accident that yielded friction coefficient values as low as .07 and .08., results that he concluded fell below the minimum coefficient of friction range of .12 to .16 required for stability. However, as this affidavit now confirms, Dr. Baumann failed to account for the apparent forces on the feet due to the ladder leaning against the wall in his calculations. Had Dr. Baumann recalculated the coefficient of friction to include this variable, the results would have revealed that the ladder would not have slid out from the wall under any of the conditions he tested, including the 2 positions that produced the lowest coefficient of friction values, which renders his opinions as to the cause of the accident inherently unreliable. When an expert’s opinion is tethered to data or methodologies “that are simply inadequate to support the conclusions reached, [as is the case here,] Daubert and Rule 702 mandate the exclusion of that unreliable opinion testimony.” Ruggiero v. Warner-Lambert Co., 424 F.3d 249, 253 (2d Cir.2005) (citation omitted); see also Macaluso v. Herman Miller, Inc., No. 01 CIV. 11496 (JGK), 2005 WL 563169, at *8 (S.D.N.Y. Mar. 10, 2005) (excluding

that the expert had “no expertise in either ladder design or ladder accident reconstruction,” had never designed or tested a ladder, and had never conducted studies or authored articles “specific to ladder design or accidents”); Sittig v. Louisville Ladder Grp. LLC, 136 F. Supp. 2d 610, 616 (W.D. La. 2001) (finding experts unqualified in the “relevant field” of ladder design). But see Rupolo v. Oshkosh Truck Corp., 749 F. Supp. 2d 31, 39 (E.D.N.Y. 2010) (finding expert qualified to testify as to the cause of ladder accident where expert was voting member of ANSI Ladder Safety Committee, had published three peer-reviewed papers on ladder safety, and had investigated over 100 ladder accidents). Even so, the Court need not decide whether Dr. Baumann is qualified to testify as an expert on ladder components, as it finds that the proffered testimony does not possess the markers of reliability espoused by Daubert. In re Paoli, 35 F.3d at 745 (“[A]ny step that renders the analysis unreliable under the Daubert factors renders the expert’s testimony inadmissible. This is true whether the step completely changes a reliable methodology or merely misapplies that methodology.”).

expert's testimony as unreliable and inadmissible "because it is based on incorrect factual assumptions that render all of his subsequent conclusions purely speculative").

Even assuming, arguendo, that Dr. Baumann correctly calculated the coefficient of friction in each of his trial pulls and that his calculations yielded unstable friction coefficient values that could conceivably support his finding that the ladder "slid essentially straight away from the wall," the Court is hard pressed to discern how those calculations permit Dr. Baumann to opine that the absence of foot articulation, the insufficient surface area of the feet, and the composition of the feet that allowed for dirt and debris to accumulate in the ablations of the footpads contributed to the reduction in the coefficient of friction that caused the ladder to slide.⁵ There is simply too great an analytical gap between the data measured by Dr. Baumann and the opinion proffered by him that the ladder was defectively designed. Russo v. Keough's Turn of the River Hardware, LLC, No. 11 CV 994 VB, 2012 WL 4466626, at *4 (S.D.N.Y. Sept. 25, 2012), aff'd, 529 F. App'x 50 (2d Cir. 2013).

Indeed, Dr. Baumann's opinions that the design and material of the ladder's feet were inadequate to prevent the ladder from slipping are not predicated on sound scientific testing or

⁵ Further, the Court does not credit Dr. Baumann's hypothesis that the accumulation of dirt and debris triggered a reduction in the coefficient of static friction between the ladder and floor, as he merely presumes, based on the variations in his friction coefficient test results and his observation that "debris was originating from and crumbling off the ladder feet" during testing, that the ladder must have slipped due to an unknown quantity of dirt and debris. Valente v. Textron, Inc., 559 F. App'x 11, 13 (2d Cir. 2014) (affirming district court's decision not to credit expert's testimony that sand and dirt could have had an impact on the coefficient of friction due to its finding that "[b]eyond his own observation that the accident path was near locations where sand and dirt were present . . . [the expert] was only able to speculate that such conditions were present on the day of the accident"); Schwarz v. FedEx Kinko's Office, 2009 WL 3459217 (S.D.N.Y. Oct. 27, 2009) ("An expert's speculations about a hypothetical condition does not create a triable issue of fact as to the existence of that condition.").

accepted engineering methodologies that validate his propositions, thereby necessitating the exclusion of his testimony. See Brooks v. Outboard Marine Corp., 234 F.3d 89, 92 (2d Cir. 2000) (“The failure to test a theory of causation can justify a trial court’s exclusion of the expert’s testimony.”). Dr. Baumann performed no tests and provided no data or studies comparing the stability and performance of a telescoping ladder with articulating feet to that of a telescoping ladder without articulating feet, let alone examined whether other telescoping ladders similar to the one used by Plaintiff offer foot articulation. There is also no indication from the expert report that Dr. Baumann relied on any data or literature to support his theory that a design defect existed with respect to the surface area of the footpads on the subject ladder. But for the Shore A hardness test referenced in his expert report, Dr. Baumann did not analyze the material properties of the exemplar ladder’s feet to determine its strength and durability relative to other types of footpad materials, nor did he subject the exemplar ladder to any testing to determine the degree or type of wear and tear required to produce the conditions observed on the subject ladder’s feet at the time of the accident.

It is clear to this Court that Dr. Baumann’s defective design theory amounts to mere speculation and conjecture, which does not withstand Daubert scrutiny. See Oddi v. Ford Motor Co., 234 F.3d 136, 156 (3d Cir. 2000) (“Although Daubert does not require a paradigm of scientific inquiry as a condition precedent to admitting expert testimony, it does require more than [a] haphazard, intuitive inquiry . . . [that does not allow the Court to determine] to existence of [the expert’s] methodology and research let alone the adequacy of it.”); see also Alevromagiros v. Hechinger Co., 993 F.2d 417, 420 (4th Cir. 1993) (remarking that more is required to make out a case of defective design than “somebody saying, ‘I am an industrial

engineer and I have looked at this ladder, it is the only one I have really looked at for this purpose, but I don't like it, there ought to be something else done to it””).

Because the methodology Dr. Baumann used to formulate his general opinion as to the cause of the accident omitted a crucial variable and was not calculated to produce reliable results, and because his opinions regarding the specific design features of the ladder are rooted in speculation and subjective belief, the Court will grant Defendants' motion to exclude the testimony of Dr. Baumann.

B. MOTION FOR SUMMARY JUDGMENT

Defendants have also filed a motion for summary judgment on Plaintiff's strict liability, negligence, and breach of warranty claims. Their motion is based, almost exclusively, on their argument that Dr. Baumann should be precluded from testifying as to the cause of the accident and the specific design features of the 15.5 foot telescoping ladder that allegedly contributed to its collapse. (Doc. No. 60 at 10-20.) Absent Dr. Baumann's expert testimony relating to the cause of the accident and whether a design defect existed at the time the ladder left the seller's hands, therefore, Plaintiff cannot support his theory of the case. See Martinez v. Triad Controls, Inc., 593 F. Supp. 2d 741, 756 (E.D. Pa. 2009) (stating that to prevail on a strict liability design defect cause of action under § 402A, a plaintiff must establish that (1) the product was defective, (2) the defect was the proximate cause of the plaintiff's injuries, and (3) the defect causing the injury existed when the product left the seller's hands) (citing Ellis v. Chi. Bridge & Iron Co., 545 A.2d 906, 909 (Pa. Super. Ct. 1988)); see also Hoffman v. Paper Converting Mach. Co., 694 F. Supp. 2d 359, 368 (E.D. Pa. 2010) (“To prevail in a negligence action, a plaintiff must show that the defendant had a duty to conform to a certain standard of conduct, that the defendant

breached that duty, that such breach caused the injury in question, and actual loss or damage.”) (citations omitted). Accordingly, as Plaintiff has failed to produce any admissible evidence from which a reasonable factfinder could infer that a defect in the design of the 15.5 telescoping ladder was the proximate cause of Plaintiff’s injuries, Defendants are entitled to judgment in their favor as a matter of law.⁶

IV. CONCLUSION

Based upon the foregoing, the Court will grant both Defendants’ motion to preclude the testimony of Plaintiff’s expert (Doc. No. 73), and the motion for summary judgment (Doc. No. 59). An appropriate Order follows.

⁶ None of the briefing in support of, or in opposition to, the instant motion for summary judgment addresses the substance of the warranty claim. Nevertheless, Defendants are entitled to judgment as a matter of law on this claim as it is predicated on the existence of an alleged design defect that Plaintiff cannot prove in the absence of Dr. Baumann’s expert testimony. (See Doc. 1-10 at 15.)